

**ABSTRACT**

A method of determining aberration of a projection system of a lithographic includes projecting a reference test pattern, projecting a second test pattern, measuring relative displacements between items in the resulting images of said reference test pattern and said second test pattern, and using said measurements to determine information on the aberration of the projection system, wherein a filter is used when imaging the second test pattern to select particular radiation paths though the projection system, and wherein the measuring is performed for a plurality of images of the second test pattern obtained at planes displaced along the optical axis relative to each other.